

What is claimed is:

1. A method for re-learning a previously programmed key within an electronic control module of a security system, comprising:

transmitting a key identification code from the previously programmed key to the electronic control module;

5 executing an authentication protocol for the previously programmed key; and

storing said key identification code in an active status within the electronic control module.

2. The method as recited in claim 1 wherein executing said authentication protocol comprises:

10 comparing said key identification code to at least one disabled identification code that is stored within the electronic control module.

3. The method as recited in claim 2 wherein executing said authentication protocol comprises:

15 determining that said key identification code is identical to at least one disabled identification code stored within the electronic control module.

4. The method as recited in claim 1 wherein executing said authentication protocol comprises:

20 determining that the previously programmed key and the electronic control module share a common unique secret code, said common unique secret code utilized with an encryption algorithm for encrypting a signal and allowing encrypted communication between the previously programmed key and the electronic control module.

5. The method as recited in claim 1 wherein executing said authentication protocol comprises:

25

transmitting at least one of said key identification code and said common unique secret code from a supplementary database to the electronic control module.

6. A method for re-learning a key within an electronic control
5 module, comprising:

transmitting a key identification code from the previously programmed key to the electronic control module;

executing an authentication protocol for the previously programmed key; and

10 storing at least one of a key password and said key identification code in an active status within the electronic control module;

wherein executing said authentication protocol includes transmitting a valid response signal from the previously programmed key to the electronic control module, said valid response signal including said key password.

15 7. The method as recited in claim 6 wherein executing said authentication protocol comprises:

determining that the previously programmed key and the electronic control module share a common unique secret code, said common unique secret code utilized with an encryption algorithm for encrypting a signal and allowing
20 encrypted communication between the previously programmed key and the electronic control module.

8. The method as recited in claim 7 wherein determining that the previously programmed key and the electronic control module share a common unique secret code, comprises:

25 encrypting a signal with said common unique secret code, said signal having a predetermined data;

transmitting said signal from the electronic control module to the previously programmed key; and

30 comparing said predetermined data to a key authentication data stored within the previously programmed key.

9. The method as recited in claim 8 wherein transmitting said valid response signal from the previously programmed key to the electronic control module comprises:

5 determining that said predetermined data is identical to said key authentication data.

10. The method as recited in claim 8 wherein executing said authentication protocol comprises:

comparing said key password to at least one module password stored within the electronic control module.

10 11. The method as recited in claim 10 further comprising:
determining that said key password is identical to said at least one module password.

12. The method as recited in claim 6 wherein executing said authentication protocol comprises:

15 comparing said key identification code to at least one disabled identification code that is stored within the electronic control module.

13. The method as recited in claim 12 further comprising:

determining that said key identification code is identical to said at least one disabled identification code.

20 14. The method as recited in claim 6 wherein executing said authentication protocol comprises:

transmitting at least one of said key identification code, a unique secret code, and a module password from a supplementary database to the electronic control module.

25 15. The method as recited in claim 14 further comprising at least one of:

comparing said key identification code to at least one disabled identification code stored in the electronic control module; and
comparing said key password to said module password.

16. A security system for re-learning a key into an electronic control
5 module, comprising:

a primary electronic control module comprised of an antenna, a memory,
and a microprocessor coupled to said antenna and said memory;

a previously programmed key having electronic circuitry with a key
identification code stored therein, said previously programmed key further
10 including a transponder for transmitting said key identification code to said
antenna of said primary electronic control module;

wherein said antenna transmits said key identification code to said
microprocessor;

wherein said memory has at least one of a disabled identification code, a
15 unique secret code, and a module password stored therein;

wherein said microprocessor executes an authentication protocol for the
previously programmed key, said authentication protocol including comparing
said key identification code to said disabled identification code.

17. The security system of claim 16 wherein said microprocessor
20 includes control logic for restoring said disabled identification code to an active
status when said microprocessor determines that said key identification code is
identical to said disabled identification code.

18. The security system of claim 16 wherein said microprocessor
includes an encryption algorithm for encrypting a signal with said unique secret
25 code, said microprocessor including control logic for storing said key
identification code when said key transmits a valid response signal to said
primary electronic control module.

19. The security system of claim 16 wherein said microprocessor
includes an encryption algorithm for encrypting a signal with said unique secret

code, said microprocessor including control logic for storing said key identification code when said key transmits a key password that is identical to said module password.

20. The security system of claim 16 further comprising at least one
5 of:

a supplementary electronic control module coupled to said primary electronic control module and intended to facilitate execution of said authentication protocol, said supplementary electronic control module for transmitting at least one of said key identification code, said unique secret code,
10 and a key password to said primary electronic control module; and

an external database selectively coupled to said primary electronic control module and intended to facilitate execution of said authentication protocol, said external database for transmitting at least one of said key identification code, said unique secret code, and said key password to said
15 primary electronic control module.